

## R E M A R K S

The Examiner requests that formal drawings be submitted in response to the Office action. This request is puzzling since formal drawings were sent along with the previous response. Therefore, the request is respectfully traversed, and the Examiner is requested to kindly review the file. If the formal drawings were not received, a new set will be sent. If, however, the sent drawings were not accepted for some reason, applicants would appreciate being informed of the nature of the deficiency so that a corrected set can be sent.

Claim 1 was rejected under 35 USC 112, second paragraph because, according to the Examiner, it is unclear "at to which cache the applications are referred [sic] to." Applicants respectfully traverse. Line 1 of the claim specifies a cache, which is characterized as a network directory cache. Line 5 refers to "the" cache. Since there is **only one** reference to a cache prior to line 5 there cannot be any ambiguity as to which cache the claim refers to. The same argument applies to claims 5 and 7.

One might guess that the Examiner would like the claims to be amended to refer to "the *network directory* cache," but applicants submit that this is not necessary and, therefore, respectfully decline to so amend the claims at this time.

Claims 1-12 were rejected under 35 USC 103 as being unpatentable over US Patent 6,208,986 issued to Schneck et al in view of US Patent 6,154,811 issued to Srbljic et al. Applicants respectfully traverse.

The Schneck et al reference basically describes a method for accessing and displaying directory data. The kernel of the method is the use of a template that controls the manner by which retrieved data is presented to a user. Specifically, a user query retrieves data from a database, and that data is correlated with a template file that controls the response that is published to the user. The Srbljic et al reference teaches that when a query seeks information from a database, a cache that holds some of the database information is queried. When the cache finds that it does not have the data it accesses other caches, in a hierarchical manner, and lastly accesses the server that holds the entirety of the database to respond to the query and to update itself with the responsive information. Thus, the combination of the Schneck et al and the Srbljic et al references teaches how to update a cache in response to a user query (and, in a sense, how to

populate the cache) and how to present the data. Claim 1, in contradistinction, does not address the presenting of information to a user, but defines a method for determining what data is to be stored in the cache and populating the cache accordingly, but the method defined in claim is nothing like the cache-populating method described by the combination of the Schneck et al and the Srblic et al references.

Addressing the Examiner's specific comments, with respect to claim 1, the Examiner cites col. 2, lines 52-53 for the proposition that Schneck et al teach the first clause of claim 1, to wit, the step of "receiving and storing a plurality of user queries." Applicants respectfully disagree. The cited passage merely teaches that the Schneck method includes a step of receiving at least one information request. There is no mention of storing the queries. The Examiner might argue that whenever information is received in a system, it must be necessarily stored in the system, even if for a very brief period of time. If applicants were to agree that such transitory storage is implied in the concept of receiving something in a physical system, then the claimed phrase "receiving and storing" would mean "receiving and storing for a very brief period of time **and storing**." In other words, the bold "storing" adds something that is other than "storing for a very brief period of time." Consequently, the phrase "receiving and storing" of claim 1 stands for more than the "receiving" in the Schneck et al reference and, therefore the conclusion must be reached that, though mindful of the Examiner's cited passage, Schneck et al do NOT disclose the first clause of claim 1.

Addressing the second clause of claim 1, the Examiner cited col. 2, lines 53-57 for the proposition that Schneck et al teach the step of "creating a query template that generalizes the user queries." Applicants respectfully disagree. The passage cited by the Examiner speaks of a method for displaying directory information that comprises the following steps:

- (1) receiving at least one information request; (2) retrieving data from a directory responding to the information request; (3) correlating the data with a template file to create a response, the template file comprising tags for controlling display of the data; and (4) publishing the response.

Clearly, none of the 4 steps in the above-quoted passage creates a query template, and it follows that none of the 4 steps in the above-quoted passage creates a query template that (a) is based on received user queries (b) and that generalizes the user queries. The closest

teaching – in the sense that something is created – is the step of creating a response by correlating retrieved data with a template. This, however, is not a step of creating the template.

The Examiner also stated that Schneck et al do not explicitly disclose the use of “receiving directory entries answering the query templates so that the directory entries can be stored in the cache.” Unfortunately, the Examiner either made a typographical error, or misread claim 1, because the claim specifies a step of “retrieving directory entries...” and not “receiving directory entries....” To put it in a light most favor to the Examiner, it is assumed that the Examiner’s statement is an admission that Schneck et al do not explicitly disclose the third clause of claim 1 and an assertion that Srbljic et al do disclose it. In support of this assertion the Examiner cites col. 1, line 65 to col. 2, line 49; col. 6, lines 20-45; and col. 13, lines 45-65. Applicants respectfully disagree that Srbljic et al teach the third clause of claim 1.

As indicated above, the Srbljic et al reference teaches the notion of a cache storing information, and the notion of a cache responding to data requests. If the desired data is not found in the cache, a request for the requested data (object) is sent to other caches in a hierarchical manner, with the last resort being the original source server. In contradistinction, claim 1 specifies a step of “retrieving directory entries answering the query template so that the directory entries can be stored in the cache.” The difference lies in the fact that Srbljic et al teaches retrieving data responsive to a *user query*, whereas claim 1 specifies retrieving data responsive to a *query template*, which template was created in a very specific manner, as defined by an earlier step of claim 1.

It is noted that one cannot equate “an object request from a client” (col. 6, line 19) to the query template of claim 1 because, by definition of the query template of claim 1, it is something that is created from generalizing a number of queries. That is, (a) the template is created by operating on a plurality of user queries, and (b), the “operating” is a generalizing of the plurality of user queries.

To conclude, it is respectfully submitted that the Schneck et al reference in view of the Srbljic et al reference does not disclose or suggest any of the three

clauses of claim 1 and, consequently, claim 1 is not obvious in view of the Schneck et al and Srbljic et al combination of references.

As for claim 2, it specifies that the directory entries are retrieved “after estimating benefits of storing the directory entries in the cache.” The Examiner points to the Srbljic et al reference, cites the same passages as for claim 1, and additionally cites the passage at col. 7, lines 45-67. Applicants respectfully disagree that Srbljic et al teach or suggest the claim 2 limitation. There is no teaching or suggestion anywhere in Srbljic et al of any **benefit** consideration relative to whether any data is stored in any cache. The best that can be said, relative to Srbljic generally and the cited passages in particular, is that Srbljic et al believe that their approach of a distributed cache system represents a better solution (than the solutions then available in the prior art) to the network load/bottleneck problem. That, however, has nothing to do with any benefit estimate in the course of storing directory entries in a cache, which claim 2 specifies. Hence, aside from the fact that claim 2 depends on claim 1, it is respectfully submitted that claim 2 is independently patentable over the cited references.

As for claim 3, the Examiner’s remarks are confusing because the Examiner asserts that Schneck et al disclose the claim 3 limitation, but the citation is identical to the citation used in connection with the Srbljic et al reference. The probability of a citation in Schneck et al being identical as to col. and line numbers to that in Srbljic et al is simply too low to be considered as valid. That leaves either that the Examiner meant to identify Srbljic et al, or meant to specify different col. and line numbers. Since assuming that the Examiner meant to cite different col. and line numbers leaves applicant with no knowledge of what the Examiner meant to cite, applicants assume that the Examiner meant to identify the Srbljic et al reference. Of course, if applicants’ assumption is wrong, it is respectfully requested that the Examiner resolve the confusion.

As to Srbljic et al reference’s citations, applicants respectfully submit that the passages in cited col. and line numbers do not teach any modification of a query template as new user queries are received. There is not even a modification

of any queries as new user queries are received. There is, however, a modification of the contents of the cache as some new user queries are receive, but that is NOT a modification of any template, and certainly not a modification of the templates mentioned in Schneck at al, which are used for presenting data to the user. Hence, aside from the fact that claim 3 depends on claim 1, it is respectfully submitted that claim 3 is independently patentable over the cited references.

Claim 4 depends on claim 1 and, at least for this reason, it is believed patentable over the cited references.

Claim 5 is an independent method claim. As for the Examiner's comment concerning the first clause, applicants disagree and respectfully direct the Examiner's attention to applicants' comments pertaining to the first clause of claim 1. Relative to the second clause of claim 5, the Examiner asserts that the passages previously cited in the Srbljic et al reference teach the step of "maintaining a plurality of candidate templates that may be used to retrieve directory entries to store in the cache." Applicants respectfully disagree. There is absolutely nothing in Srbljic et al – in the cited passages or elsewhere – relating to most of the notions present in the second clause of claim 1. In particular, there is no notion of a *template* (the word "template" does not appear anywhere in the text), there is no notion of *candidate* templates, there is no notion of *directory entries*, and there is no notion of *maintaining* anything that may be used to retrieve directory entries. The only notions relating to this clause that are found are the notion of obtaining data that is not in the cache and storing it in the cache, and the notion of responding to a user query. It is noted that even the user queries that are used to retrieve data are not maintained.

As for the third clause of claim 5, the Examiner cites col. 2, lines 38-57 and col. 4, lines 10-25 of Schneck et al for the proposition that the step of "generating a plurality of new candidate templates that generalize the candidate templates with the user query" is disclosed. Applicants respectfully disagree. The Schneck et al system is able to create custom directory information search forms, but they are not created FROM a query, and they are certainly not created from a generalization of "with the user query."

In short, it is applicants' view that none of the claim 5 clauses find proper correspondence in Schneck et al taken in view of Srbljic et al and, therefore, applicants believe that claim 5 is patentable over Schneck et al taken in view of Srbljic et al.

As for claims 6-8, applicants respectfully disagree with the Examiner's reasoning and, in the interest of brevity, respectfully direct the Examiner's attention to the above arguments. Accordingly, it is respectfully submitted that claim 6-8 are patentable over Schneck et al in view of Srbljic et al.

Claims 9-12 depend on claim 8 and therefore, they are believed to be patentable. However, most if not all of these claims contain limitations that, additionally, make the claims patentable. Specifically, claim 9 specifies retrieving directory entries "only if they estimated benefit is greater than an estimate of benefits of old directory entries in the cache." Claims 10 and 11 have a similar limitation. No such notion is present in either of the references, and the passages cited by the Examiner do not teach or suggest any notion of benefits, or any notion of conditional retrieving. If the Examiner believes that within the cited 120 (or so) lines of text these notions are present, applicants respectfully request a more focused citation, so that a proper response can be presented.

New claims 13-16 are presented. Applicants believe that these claims are clearly patentable over the cited references.

In view of the above amendments and remarks, applicants submit that all of the Examiner's objections and rejections have been overcome. Reconsideration and allowance of the outstanding claims are respectfully solicited.

Respectfully,  
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Dated: \_\_\_\_\_

9/10/04

By \_\_\_\_\_

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